STATUS OF AND AMENDMENTS TO THE CLAIMS

1. (currently amended): Apparatus for enhancing solubility of a solute in a solvent, the apparatus comprising a solvent and/or solute inlet having a fluidising unit provided with a single series of tangential slots which creates one vortex of rotating flow in the solvent and/or solute between the fluidising unit and a discharge pipe.

2. (original): Apparatus as claimed in claim 1, in which a fluid interfacial or boundary layer exists within the vortex where enhanced mass transfer, or dissolution of solute into the solvent takes place.

3. (original): Apparatus as claimed in claim 1, in which the solute is leached from a carrier ore.

4. (original): Apparatus as claimed in claim 3, in which means are provided to achieve at least two stages of leaching, targeted at different solutes to be dissolved in different solvents.

5. (original): Apparatus as claimed in claim 1, in which the solute is salt and the solvent is water.

6. (original): Apparatus as claimed in claim 1, in which the solute is an edible or potable solute for use in a solution for the food and brewing industry.

7. (original): Apparatus as claimed in claim 1, for use in accelerated malting of materials for the brewing industry.

8. (previously presented): Apparatus as claimed in claim 1, for accelerated dissolving of materials selected from the group consisting of sugars, glucoses and cola nuts for use in the soft drinks industry.

9. (previously presented): Apparatus as claimed in claim 1, for pressurised rapid wetting of seeds prior to sowing, to accelerate germination and growth.

10. (original): Apparatus as claimed in claim 1, for pressurised treatment of seeds with fungicides, nutrients, fertilizers and/or pesticides prior to sowing.

11. (previously presented): Apparatus as claimed in claim 1, in which the fluidising unit operates on a continuous flow of solvent and/or solute.

12. (currently amended): Apparatus as claimed in claim 1 further comprising a flow chamber having a fluid inlet and a fluid outlet ~~and at least one tangential slot~~.

13-20. (canceled)